

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18624 - L2 Version 2
Chandra X-Ray Center

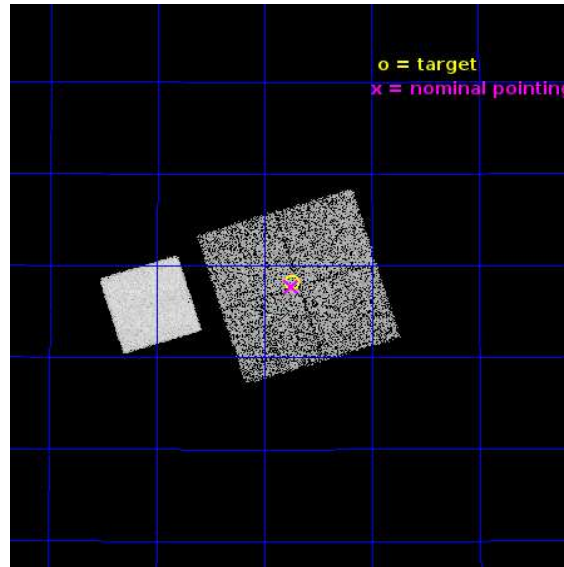
L2 Processing Date : Apr 11 2016

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

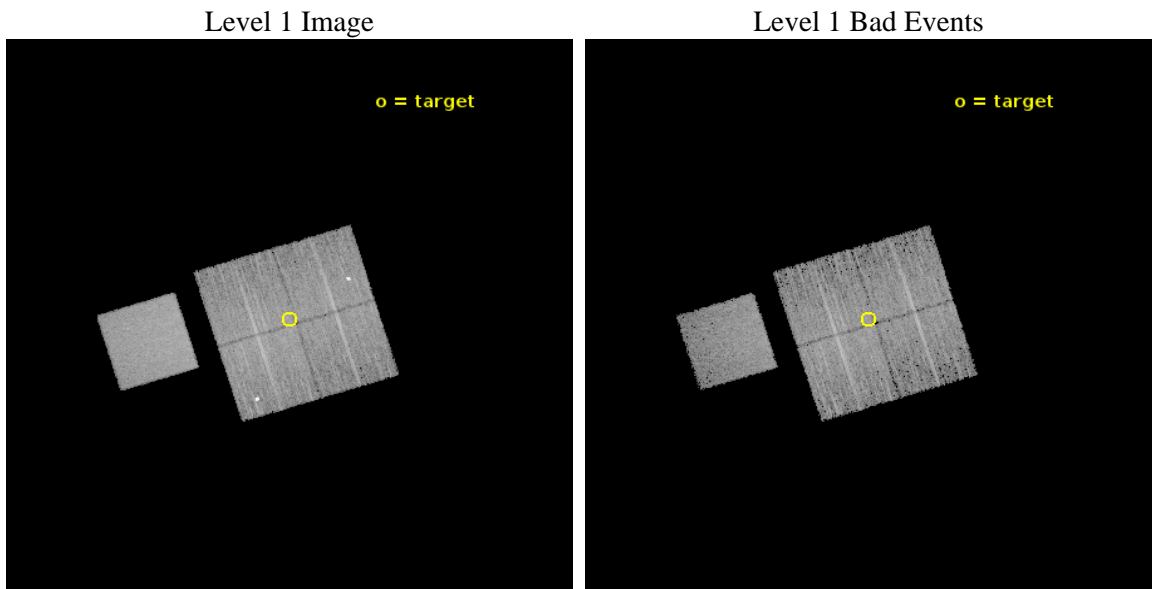
seq_num	801632	Sequence number
obs_id	18624	Observation id
title	Lensing Calibration of the Evolution of Cluster Scaling Relations for eROSITA	Proposal title
observer	Dr. Peter Predehl	Principal investigator
object	CODEX 24865	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	125.686667	Observer's specified target RA [deg]
dec_targ	41.46925	Observer's specified target Dec [deg]
ra_nom	125.6873367685	Nominal RA [deg]
dec_nom	41.461994197237	Nominal Dec [deg]
roll_nom	252.67703310935	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9045.7590194941	Sum of GTIs [s]
livetime	8927.5695185135	Livetime [s]
ontime0	9045.7590194941	Sum of GTIs [s]
ontime1	9048.9000697136	Sum of GTIs [s]
ontime2	9045.7590095997	Sum of GTIs [s]
ontime3	9045.7590194941	Sum of GTIs [s]
ontime7	9048.9000697136	Sum of GTIs [s]
l2events	51065	Number of level 2 events



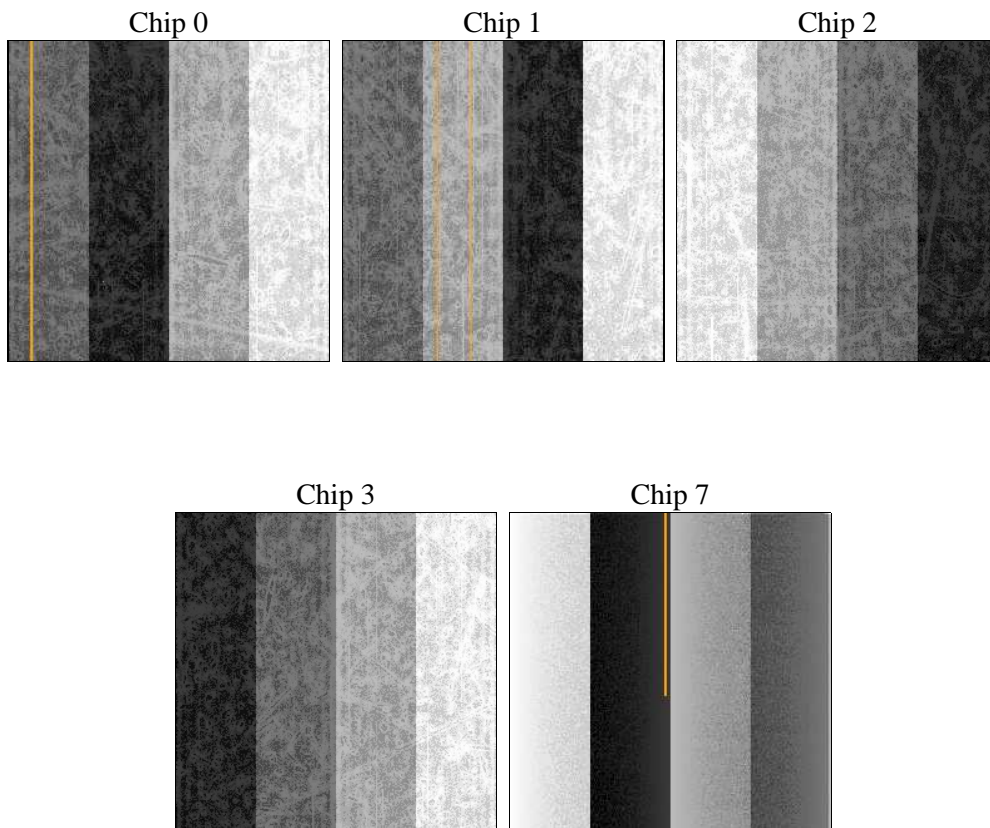
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	9045.7590194941	Sum of GTIs [s]
caldsver	4.7.1	 	ontime0	9045.7590194941	Sum of GTIs [s]
date	2016-04-11T15:43:57	Date and time of file creation	ontime1	9048.9000697136	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9045.7590095997	Sum of GTIs [s]
			ontime3	9045.7590194941	Sum of GTIs [s]
			ontime7	9048.9000697136	Sum of GTIs [s]
			l1events	300496	Number of level 1 events

2.1.4 Events

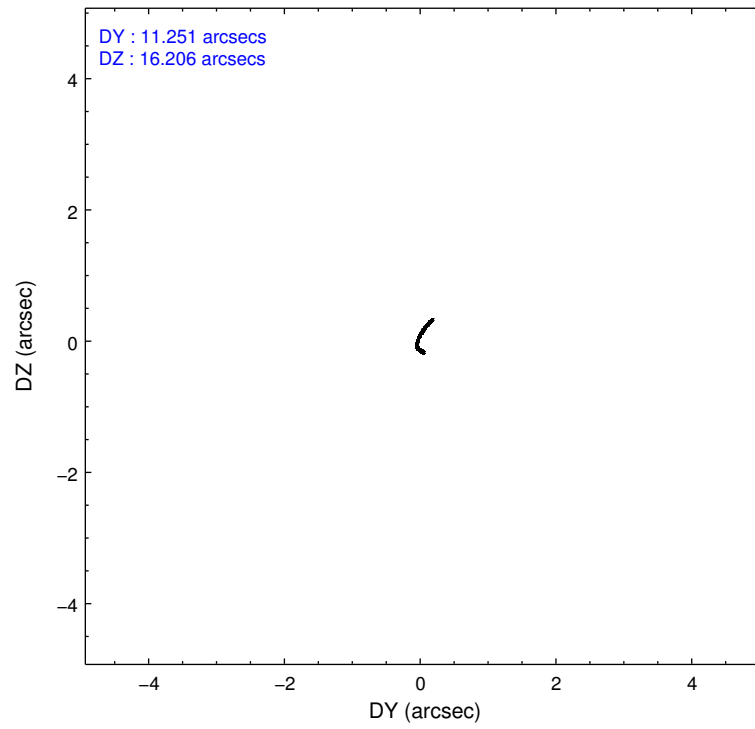
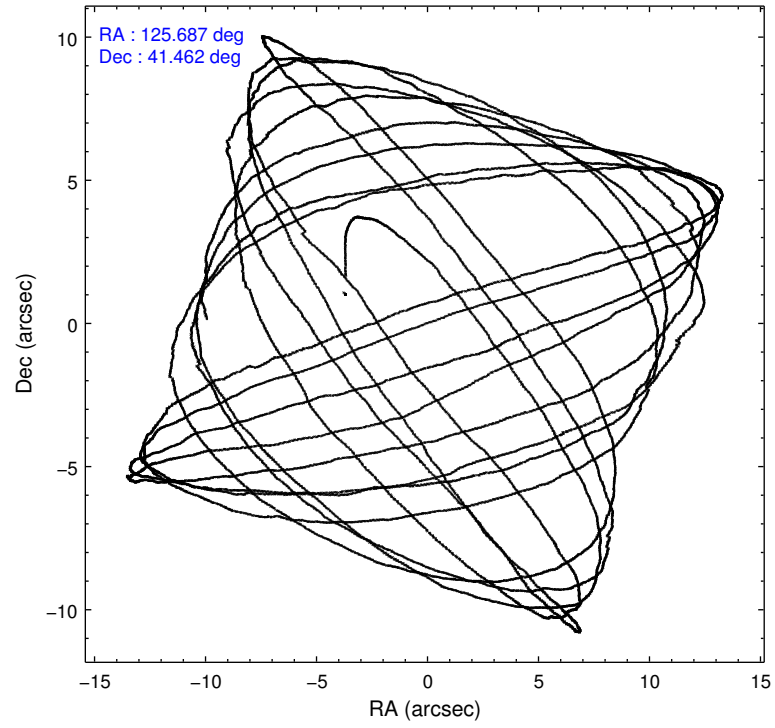
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	51478	56272	63621	54720	74405
rejected events	45273	47099	54935	48901	43208
rejected %	87%	83%	86%	89%	58%

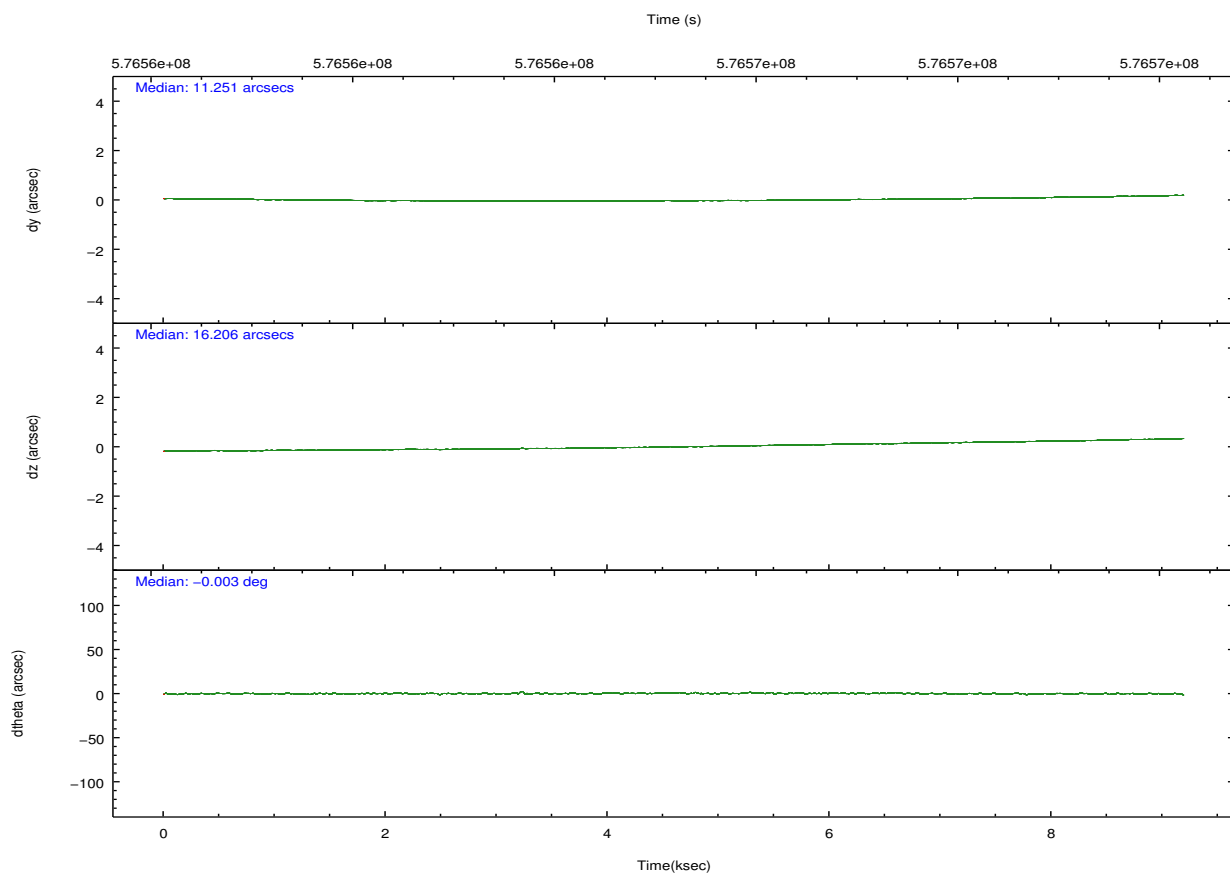
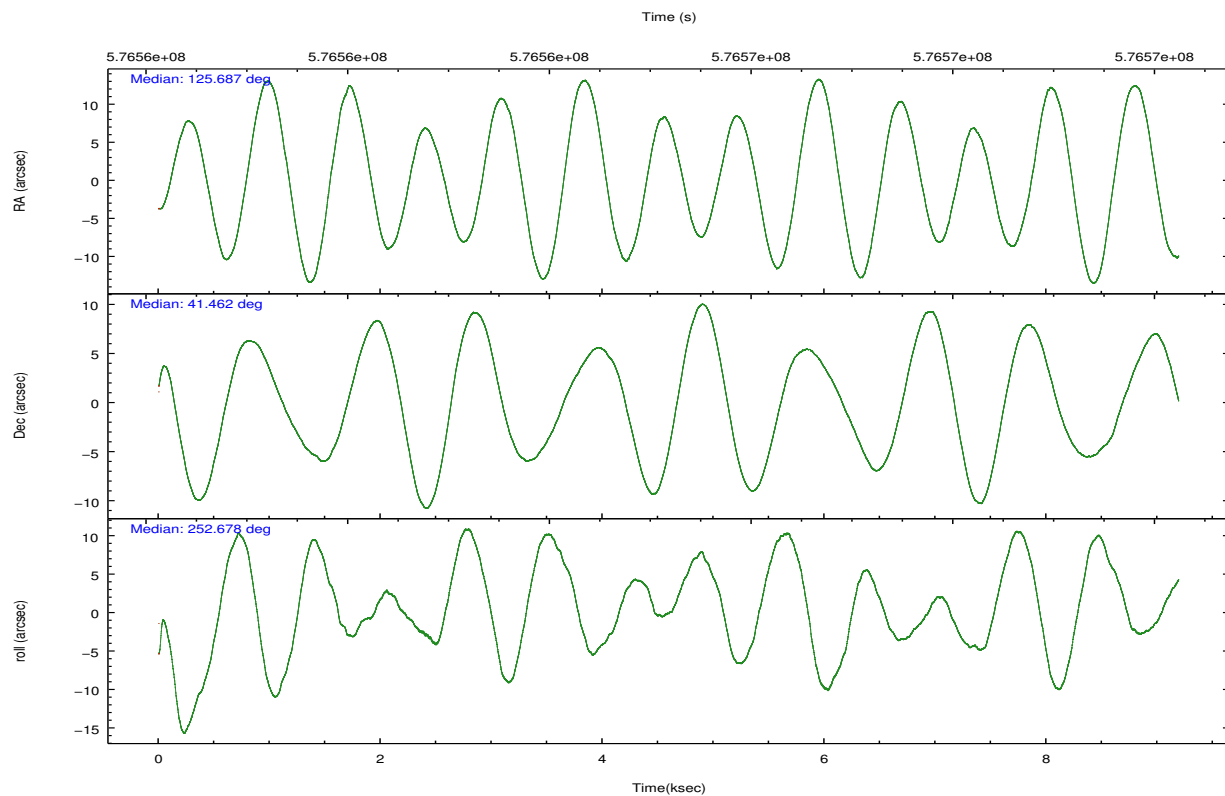
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	2100	4570	4890	2000	2386
	4%	8%	7%	3%	3%
grade 1 events	36	36	30	32	90
	0%	0%	0%	0%	0%
grade 2 events	1517	1672	1425	1329	6532
	2%	2%	2%	2%	8%
grade 3 events	653	643	575	603	2275
	1%	1%	0%	1%	3%
grade 4 events	590	647	570	655	2267
	1%	1%	0%	1%	3%
grade 5 events	2335	2454	2158	2799	6876
	4%	4%	3%	5%	9%
grade 6 events	1347	1642	1229	1234	17743
	2%	2%	1%	2%	23%
grade 7 events	42900	44608	52744	46068	36236
	83%	79%	82%	84%	48%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	125.679098	125.6873367685024	CCD I2 on	Y	Y
[deg] Pointing Dec	41.488895	41.46199419723675	CCD I3 on	Y	Y
[deg] Pointing Roll	252.473806	252.6770331093519	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	576560774.184000	576559686.9131	CCD S5 on	N	N
Observation start date	2016-04-09T03:45:06	2016-04-09T03:28:06	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	576569774.184000	576570860.43874	On-chip summing requested	N	N
Observation end date	2016-04-09T06:15:06	2016-04-09T06:34:20	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



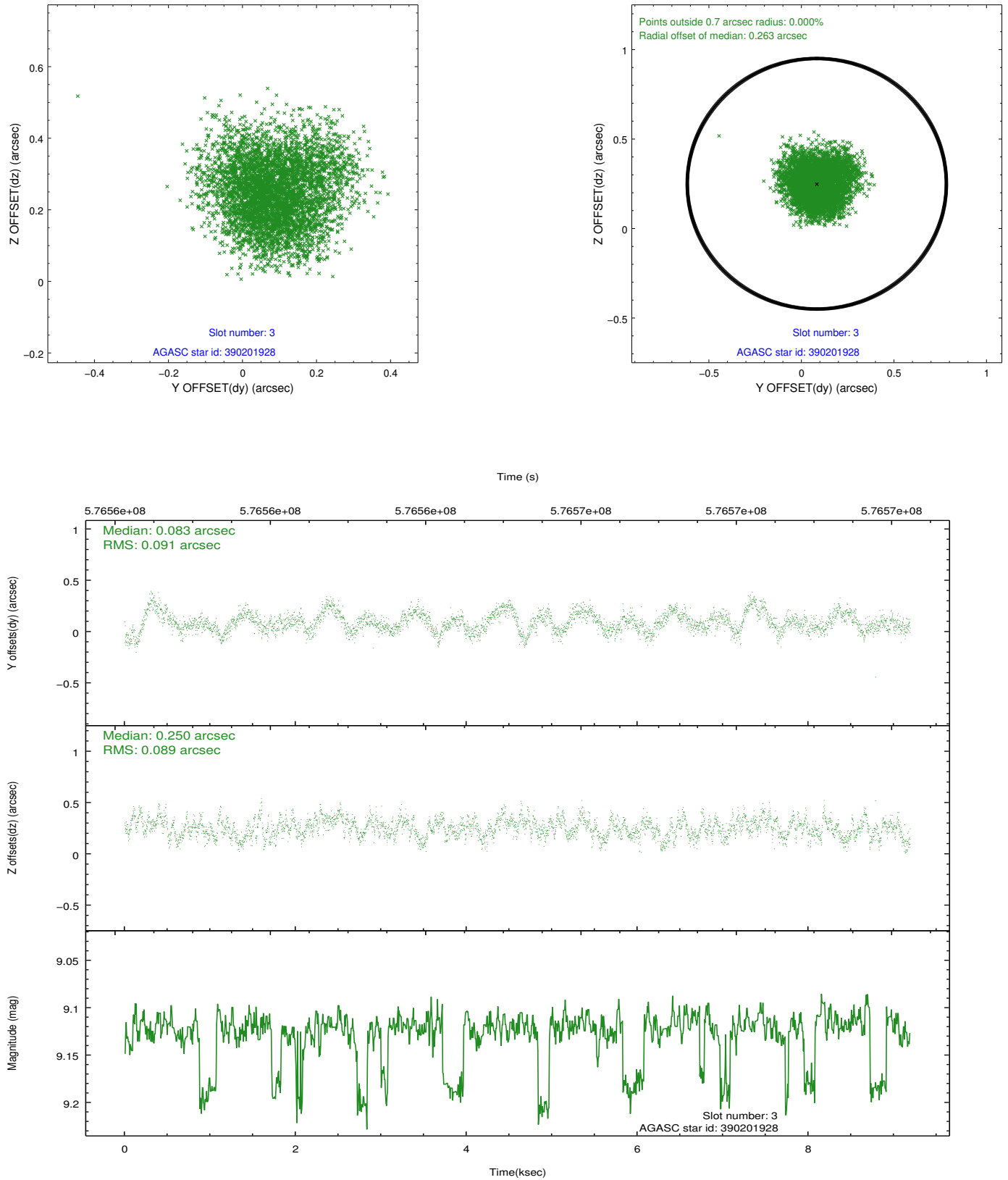


Slot Statistics

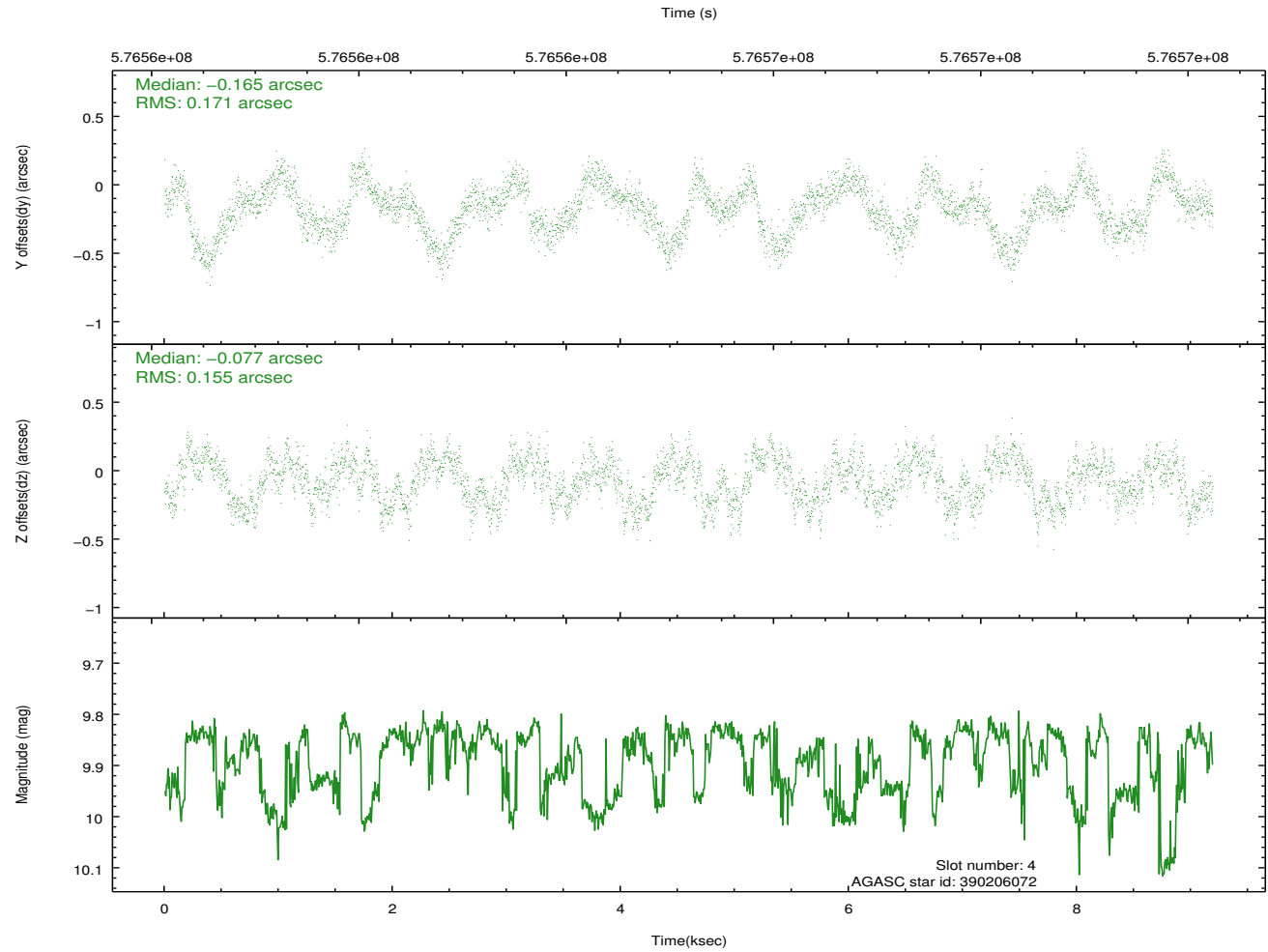
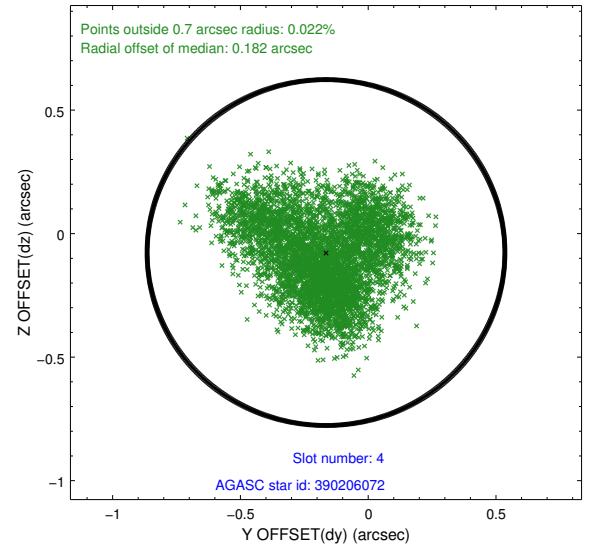
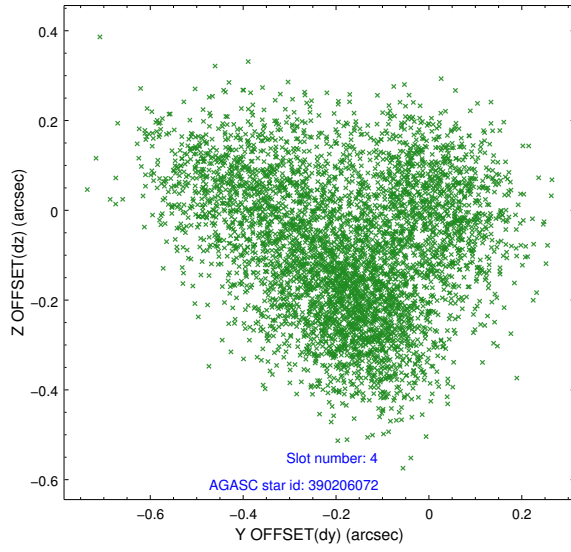
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.29	2242	0.106	-0.117	0.010	0.021	0.000000	0.000000	928.41	-839.97
1	FID		ACIS-I-5	7.27	2241	-0.323	0.062	0.007	0.011	0.000000	0.000000	-1819.82	1057.37
2	FID		ACIS-I-6	7.27	2242	0.126	0.124	0.011	0.019	0.000000	0.000000	393.30	1702.63
3	GUIDE	used	390201928	9.12	4481	0.083	0.250	0.137	0.217	125.739747	41.940669	-1599.37	-334.43
4	GUIDE	used	390206072	9.88	4447	-0.165	-0.077	0.251	0.380	126.079424	41.554588	-552.77	956.56
5	GUIDE	used	390210672	9.54	4481	0.029	-0.140	0.206	0.315	125.971005	41.444900	-86.95	798.62
6	GUIDE	used	390215872	9.00	4481	0.069	-0.030	0.162	0.250	125.193631	42.101515	-1715.00	-1901.90
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

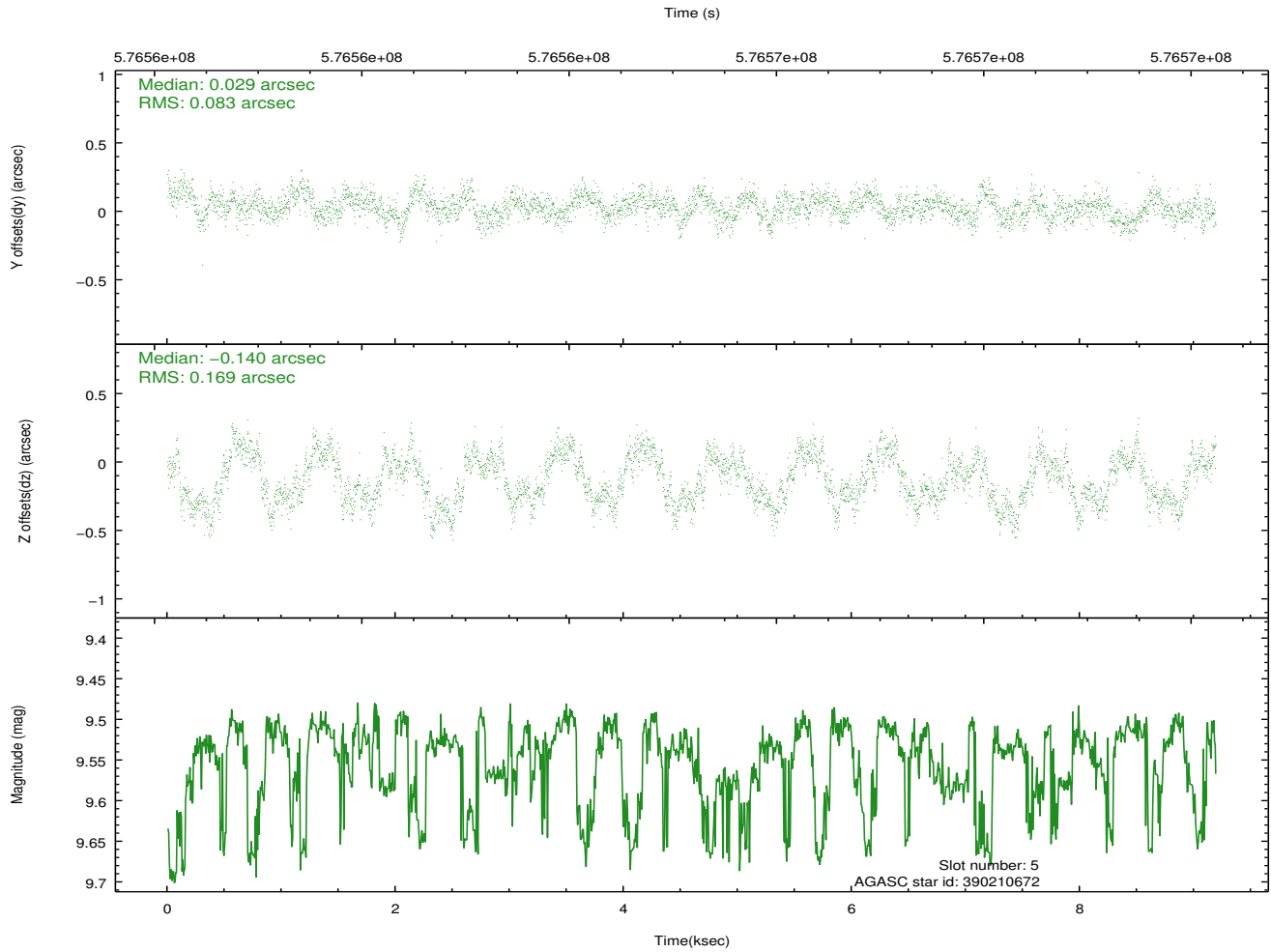
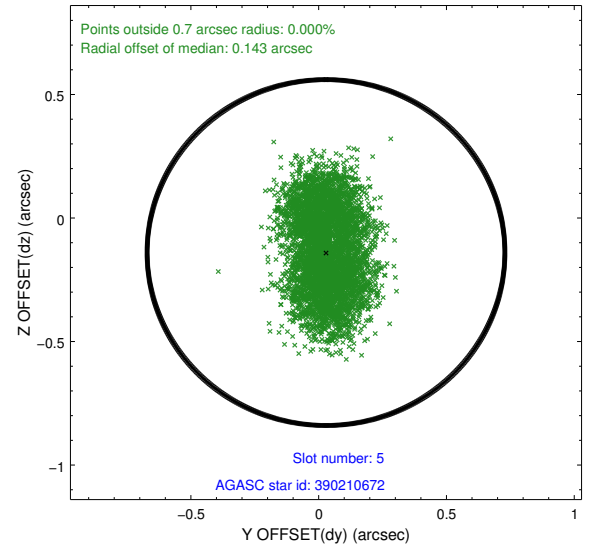
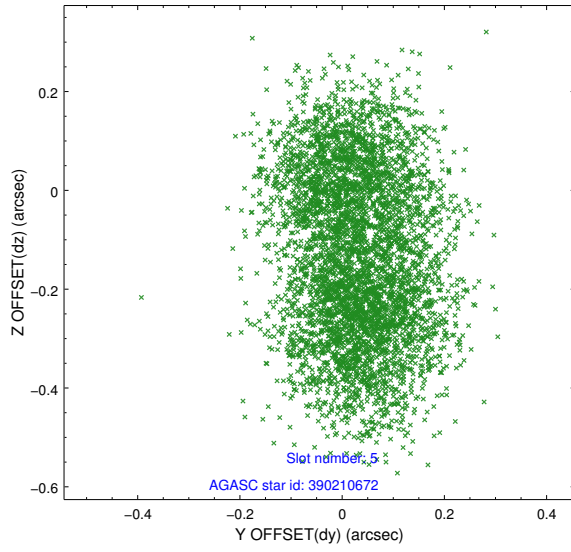
2.4.1 Slot 3



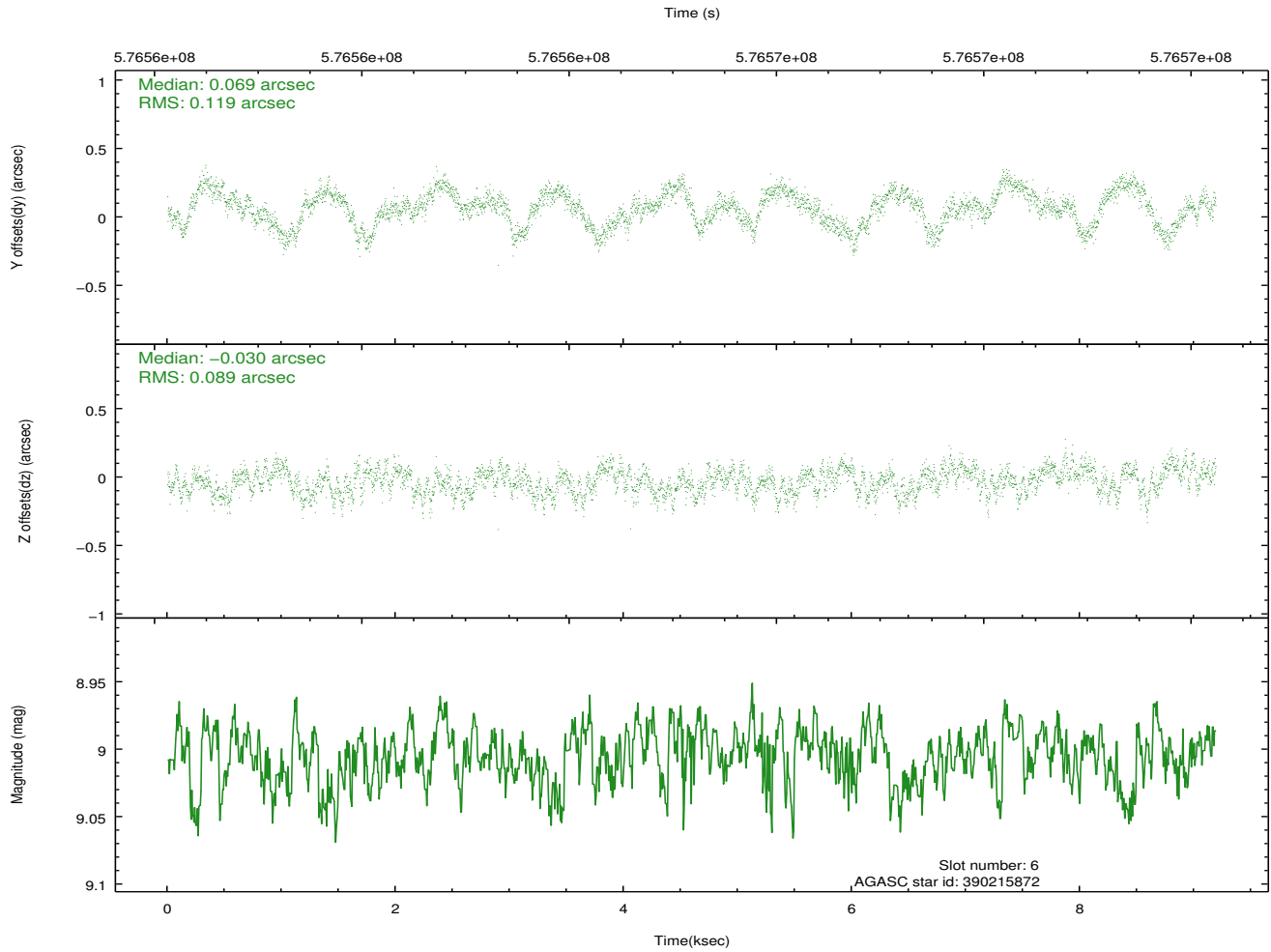
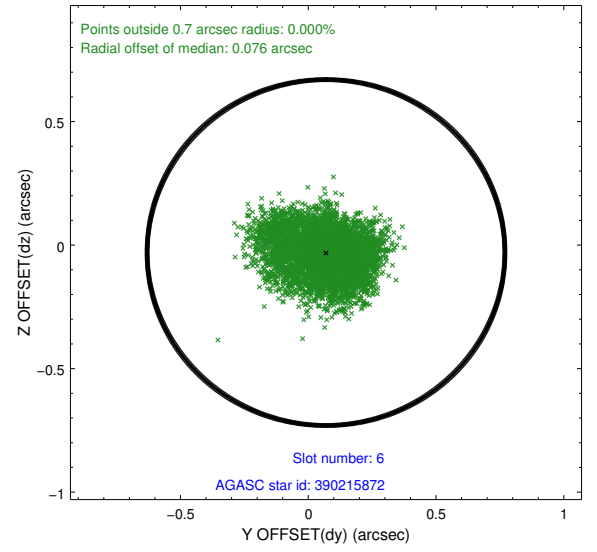
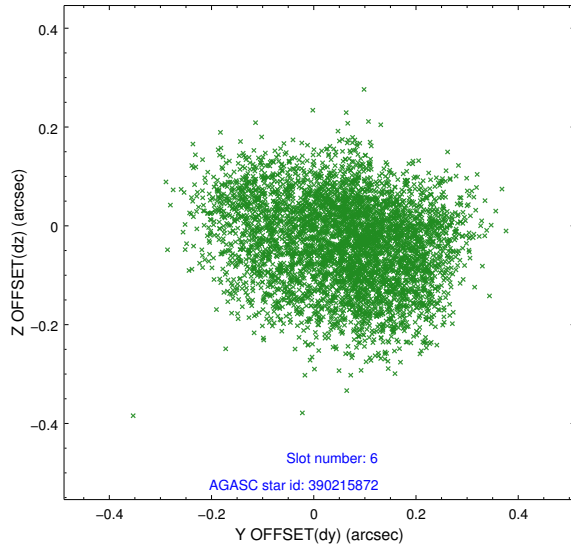
2.4.2 Slot 4



2.4.3 Slot 5

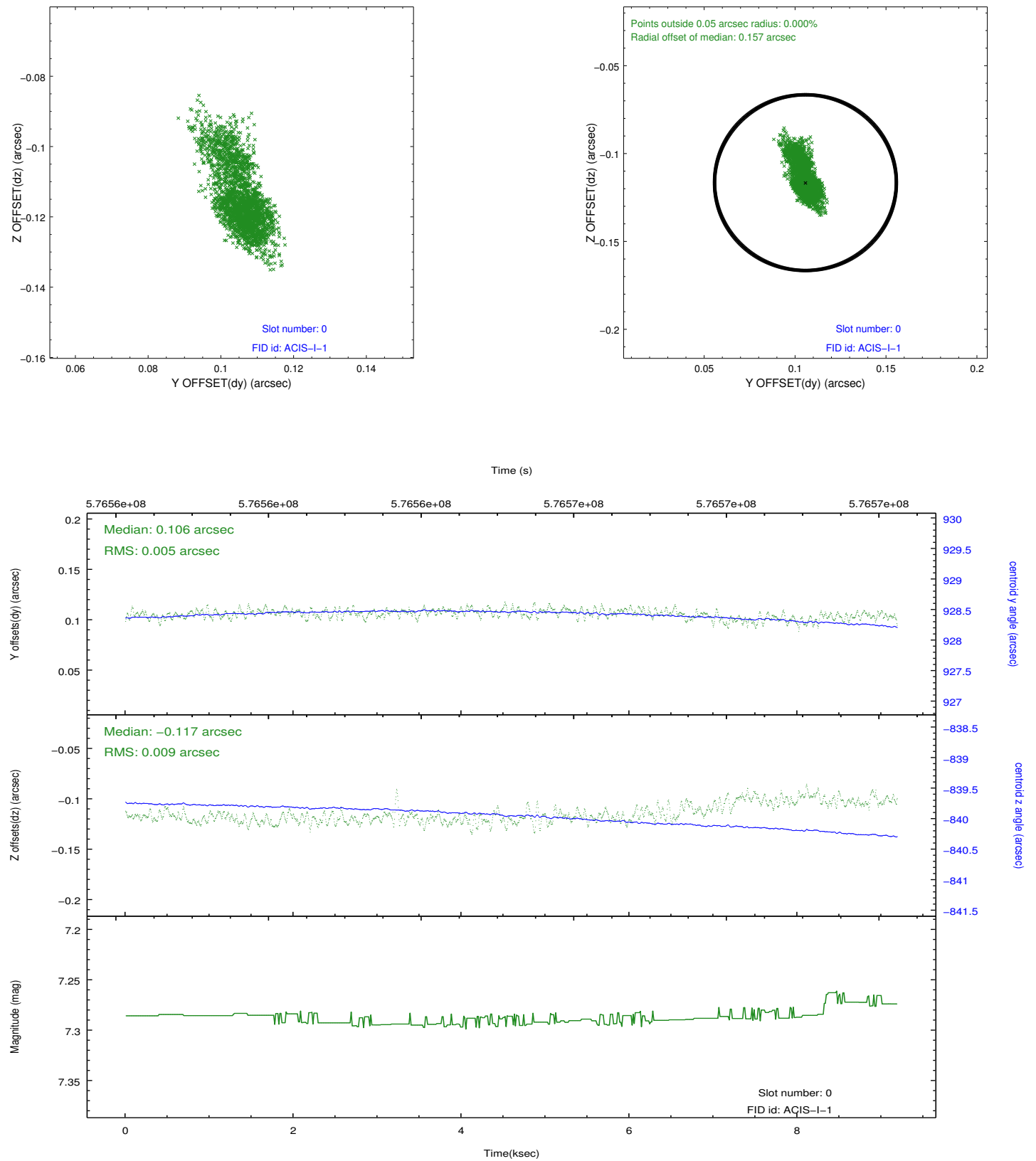


2.4.4 Slot 6

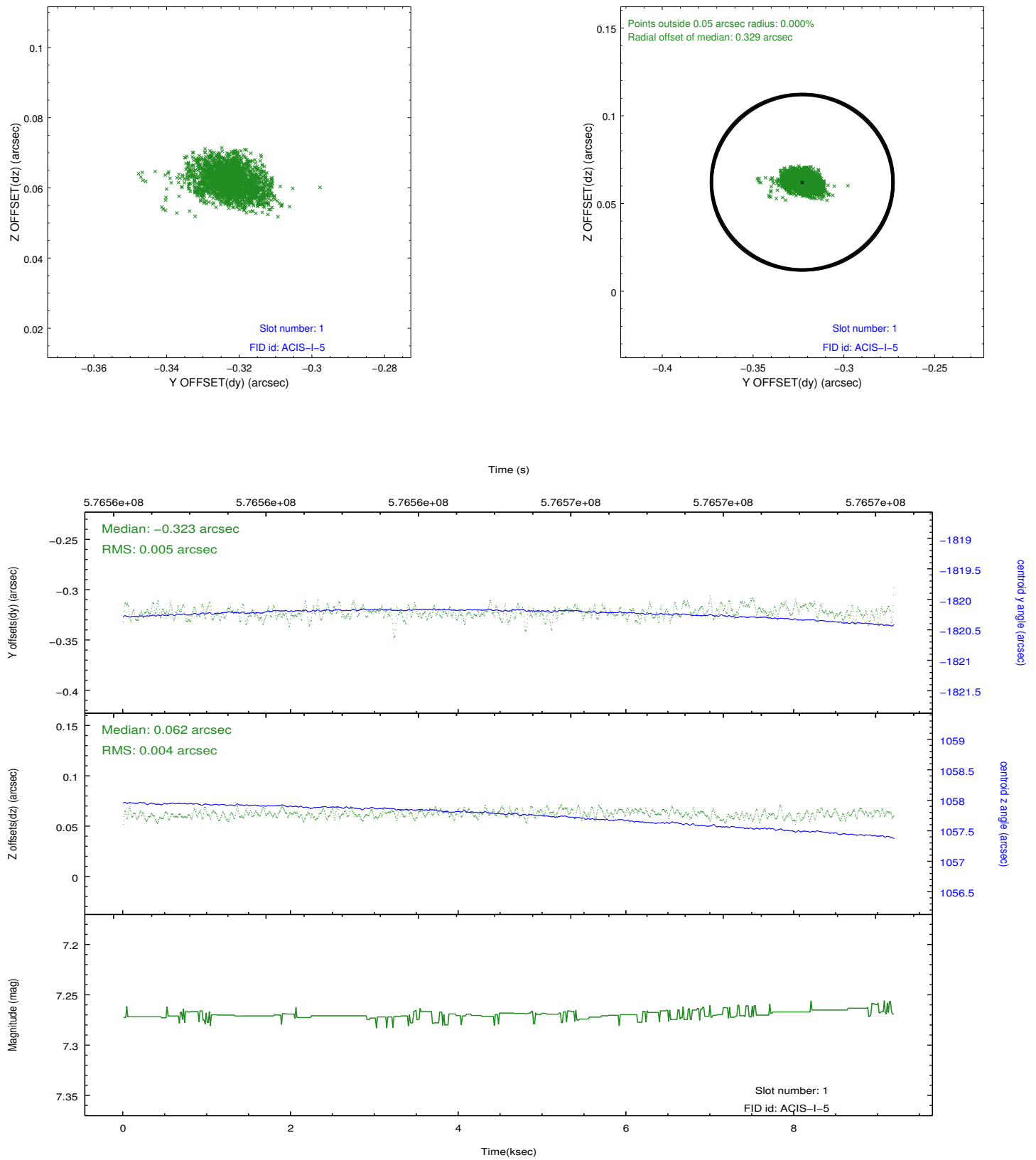


2.5 FID Slots

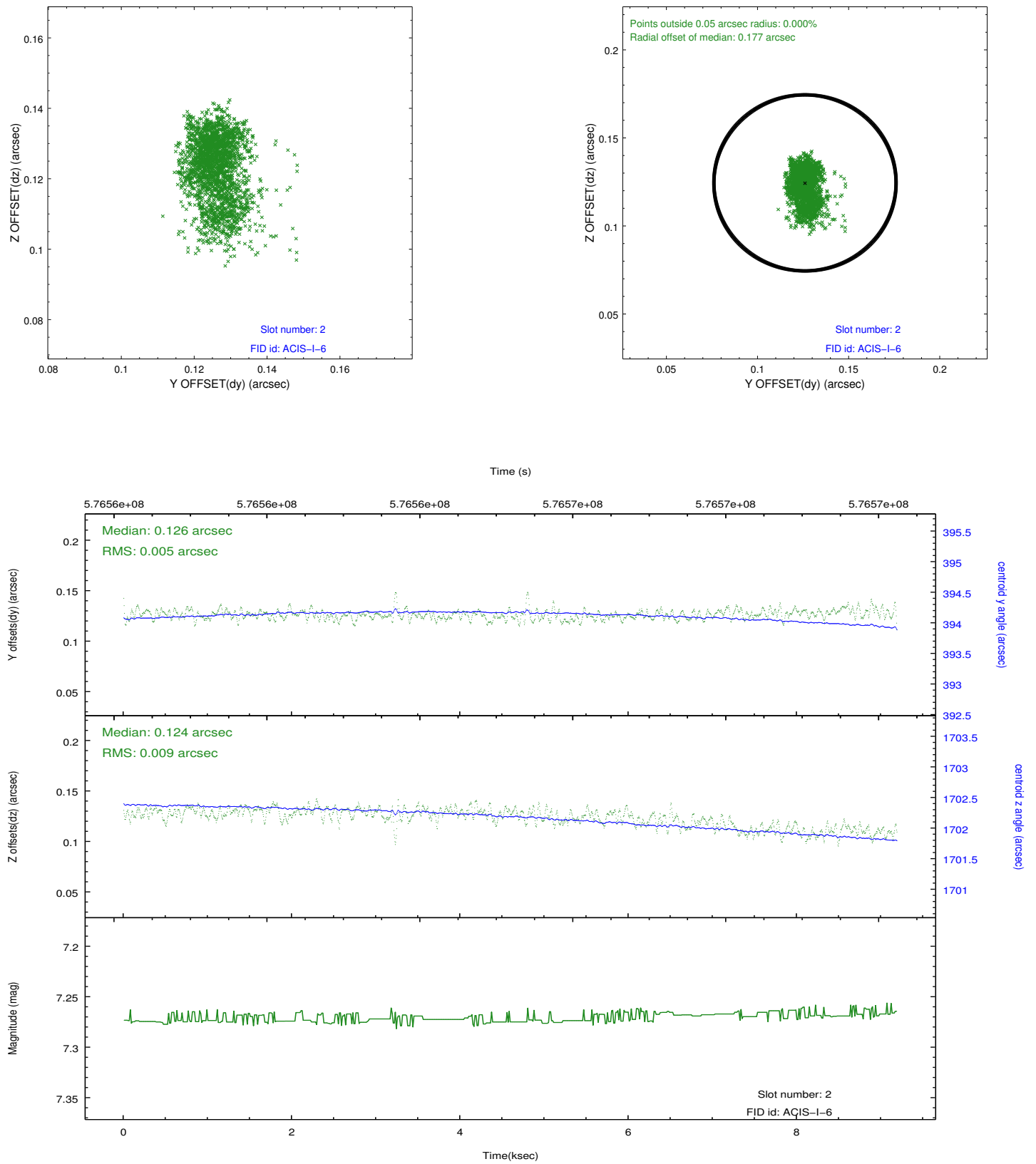
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2016.04.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.0457590194941

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.